CHAPTER 3. CONDUCT RAMP INSPECTION OF OPERATOR'S AIRCRAFT

SECTION 1. BACKGROUND

1. PTRS ACTIVITY CODES

A. Maintenance: 3627

B. Avionics: 5627

3. OBJECTIVE. This chapter provides guidance for sampling the quality of maintenance and the degree of compliance with the operator's maintenance procedures on in-service FAR Part 121, 125, or 135 aircraft.

5 GENERAL.

A. *FAA Inspection Personnel*

(1) It is important that Aviation Safety Inspectors (ASIs) become familiar with the type of aircraft to be inspected before performing the inspection. This can be accomplished by on-the-job training.

(2) Due to the hub and spoke concept, many aircraft have less than one hour ground time. To ensure that the inspection is performed adequately, it is recommended that two inspectors perform this task in exterior and interior phases.

B. *Coordination*

(1) Airworthiness and Operations ASIs possess various degrees and types of expertise and experience. An ASI who needs additional information or guidance should coordinate with personnel experienced in that particular specialty.

(2) Geographic units may need to coordinate with the Certificate Holding District Office (CHDO) as they do not always have access to the operator's maintenance procedures manual. In addition, when discrepancies are found, the Geographic unit should communicate with the CHDO.

C. Use of FAA Form 8000-39, Air Operations Area Identification Card. Conflicts are occurring between ASIs performing ramp inspections and airport security personnel allowing access to aircraft and other secure areas. Proper use of FAA Form 8000-39 and airport identification badges should relieve some of these problems.

(1) FAA Form 8000-39 provides the ASI with an identification media that allows access to secured areas. ASIs must display this credential on an outer garment to be permitted entry to, and while in airport secured areas. Access through physical barriers may require assistance from airport security.

(2) When an ASI anticipates the need for access for more than one consecutive day (i.e., NASIP Inspections), the ASI should try to obtain a temporary airport identification. At airports where an ASI is normally assigned, the ASI should acquire a permanent airport identification. FAA Form 8000-39 and airport identification cards/badges do not allow ASIs to bypass any screening points.

(3) When difficulties arise in obtaining access to airport secured areas, the ASI should contact, through their supervisor, the Civil Aviation Security Field Office (CASFO), for that airport so that problem can be addressed. In a rush situation, the ASI should find an appropriate badge-holding employee and request an escorted service to their destination.

7. INITIATION AND PLANNING

A. *Initiation.* This task is scheduled as part of the work program. Additional inspections are initiated by national, regional, or district office special requirements.

B. *Planning.* The ramp inspection provides the ASI with a good opportunity to ensure that the compliance dates and requirements of new Airworthiness Directives (ADs) and regulatory revisions have been met. ADs, Service Difficulty

Report Summaries, Maintenance/Airworthiness Bulletins, and PTRS entries should be reviewed, when available, so as to become familiar with current service difficulty information.

9. MAINTENANCE RECORDS

A. Regulations require that maintenance be recorded whenever it is performed prior to an approval for return to service. The operator's maintenance procedures manual should describe the procedures for ensuring that these recording requirements are met, including the specific instructions on when an airworthiness release or appropriate maintenance log entry is required.

B. All mechanical discrepancies entered in the maintenance log must be either corrected or deferred using the methods identified in the operator's maintenance procedures manual.

C. The Minimum Equipment List has certain procedures and conditions that must be met prior to deferring the item(s).

(1) These procedures are identified by "O", "M", and "O/M" and are normally contained in the operator's approved Minimum Equipment List. There are occasions in which the list references these procedures to another document.

(2) When reviewing the records for Minimum Equipment List compliance, the ASI must determine what procedures are required for deferral and ensure that these procedures are accomplished.

(3) The ASI must ensure that all applicable repetitive Minimum Equipment List procedures are accomplished for those items that are deferred and are continuing to be deferred through the station. These repetitive maintenance procedures must be signed off in the maintenance log as evidence that the procedures were accomplished.

11. DEFERRED MAINTENANCE

A. Minimum Equipment List-Deferred Maintenance. The operator's approved Minimum Equipment List allows the operator to continue a flight or series of flights with certain inoperative equipment. The continued operation must meet the requirements of the Minimum Equipment List deferral classification and the requirements for the equipment loss.

B. *Other Deferred Maintenance*

(1) Operators frequently use a system to monitor items that have been inspected previously and found to be within serviceable limits. These items are still airworthy, yet warrant repair at a later time or when items no longer meet serviceable limits. This method of deferral may require repetitive inspections to ensure continuing airworthiness of the items. Examples of items that are commonly deferred in this manner are fuel leak classifications, dent limitations, and temporary (airworthy) repairs.

(2) Passenger convenience item (not safety/airworthiness related) deferrals should be handled in accordance with the operator's program.

C. The maintenance program approved for an operator must provide for prompt and orderly repairs of inoperative items.

13. CABIN INSPECTION

A. This inspection should be performed, when possible, without disturbing the loading and unloading of passengers. The inspection can still be performed when some passengers are on board during through-flights, but good judgment must be exercised by inspecting areas away from the passengers.

B. Any discrepancy should be brought to the attention of the flight crew or appropriate maintenance personnel immediately.

15. CARGO/COMBINATION CONFIGURED AIRCRAFT

A. Inspection results have disclosed instances of significant aircraft structural damage resulting from careless loading of cargo, such as:

- Torn or punctured liners, indicating hidden damage to circumferential stringers, fuselage skin, and bulkheads
- Damaged rollers, ball mats, etc., causing significant structural damage to the floors
- Corrosion and structural damage caused by improper handling of some hazardous materials

B. The surveillance of hazardous material handling is not the primary function of the inspector. The ASI should contact the appropriate FAA Security Division if discrepancies are noted in the handling of hazardous materials.

17. PERFORMING THE RAMP INSPECTION

A. This inspection must be accomplished without interfering with the turnaround of the aircraft. The following list of items are just some of the activities that could cause a delay in the turnaround time if interfered with.

- Boarding and deplaning of passengers
- Servicing
- Fueling
- Maintenance
- Baggage handling
- Any other operator activity

B. Any discrepancies noted must be brought to the attention of appropriate personnel immediately, to allow the operator the opportunity to take corrective action without interrupting the flight schedule. The ASI must verify that all corrective actions taken were in accordance with the requirements of the operator's maintenance procedures manual.

SECTION 2 PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS

A. *Prerequisites*

- Knowledge of the regulatory requirements of FAR Parts 121, 125, and 135, as applicable
- Completion of the Airworthiness Inspectors Indoctrination Course or equivalent
- Experience working with similar type aircraft

B. *Coordination*

- This task may require coordination between Airworthiness, Cabin Safety, and Operations Aviation Safety Inspectors (ASIs)
- Geographic units should coordinate with the CHDO

3. REFERENCES, FORMS, AND JOB AIDS

A. *References*

- FAR Parts 21, 23, 25, 27, 29, 45, 47, and 91

- Order 8340.1, Maintenance Bulletins, as amended
- Operator's Maintenance Procedures Manual

B. *Forms*

- FAA Form 8000-39, Air Operations Area Identification Card

C. *Job Aids*

- Vol. 3, Ch. 1, Introduction to Aircraft and Equipment, Figure 1-1, Interior Inspection Guidelines
- Vol. 3, Ch. 1, Introduction to Aircraft and Equipment, Figure 1-2, Exterior Inspection Guidelines

5. PROCEDURES

A. *Initiate Ramp Inspection in Accordance with the District Office Work Program*

B. *Prepare for the Inspection*

(1) Review the operator's schedule, select the flight to be inspected, and determine the type of equipment and ground time.

(2) Determine if any recent problem areas have been identified for that type of aircraft.

(3) Determine if recent regulatory changes and AD requirements affect the aircraft to be inspected.

C. Conduct Exterior Inspection, as Applicable. Perform this inspection in accordance with Vol. 3, Ch. 1, Introduction to Aircraft and Equipment, Figure 1-2, Exterior Inspection Guidelines.

D. *Interview Flight Crew.* Introduce yourself to the flight crew and describe the purpose and scope of the inspection.

E. *Inspect Aircraft Maintenance Records*

(1) Ensure that all open discrepancies from the previous flight are resolved per the operator's manual, prior to departure of the aircraft.

(2) Review the maintenance records to determine if repetitive maintenance problems exist that might indicate a trend.

(3) Ensure that all Minimum Equipment List items are deferred in accordance with the provisions of the operator's approved Minimum Equipment List.

(a) Review the operator's approved Minimum Equipment List to determine that conditions, procedures, and placarding requirements were accomplished to correctly defer specific items.

(b) Note the date when an item was first deferred to determine if the maximum allowed length of deferral was exceeded. Accomplish this by examining maintenance record pages, the deferred maintenance list, or deferred maintenance placards or stickers.

(4) Ensure that an airworthiness release, maintenance record entry, or appropriate approval for return to service has been made after the completion of maintenance.

(5) Ensure that the maintenance record contains the following for each discrepancy:

- Description of the work performed or a reference to acceptable data
- Name or other positive identification of the person approving the work
- Name of the person performing work, if outside the organization

F. *Perform Interior Inspection, as Applicable.* Perform this inspection in accordance with Vol. 3, Ch. 1, Introduction to Aircraft and Equipment, Figure 1-1, Interior Inspection Guidelines.

G. *Debrief Operator.* Inform the flight crew or appropriate personnel that the inspection has been completed. Discuss the discrepancies brought to the operator's attention during the inspection.

H. *Examine Maintenance Record Entries.* Ensure that the operator has recorded all discrepancies noted during this inspection. If time is available, monitor the operator's corrective actions.

I. *Analyze Findings.* Analyze each finding to determine if the discrepancies are the result of improper maintenance and/or missing or inadequate maintenance/inspection procedures.

7. TASK OUTCOMES

A. *File PTRS Transmittal Form*

B. Completion of this task can result in the following:

(1) Appropriate enforcement action when analysis of the findings disclose improper maintenance.

(2) Written notification to the operator of the necessary changes to the manual, when analysis of the findings disclose missing or inadequate maintenance/inspection procedures.

(3) Communication with the CHDO by the Geographic unit finding discrepancies.

C. *Document Task.* File all supporting paperwork in the operator's office file.

9. FUTURE ACTIVITIES. Based on inspection findings, determine if closer surveillance, additional enforcement, other job tasks, and/or additional coordination between the CHDO and geographic units are required to regain compliance.